

Serial No.: 10/751,153  
Group Art Unit: 2616  
Examiner: Frank Duong

In the claims:

Claims (1-15) canceled.

16 (new). An enhanced Distance Vector Multicast Routing Protocol (DVMRP) method for regulating one or more multicast streams in a first router, comprising the steps of:

transmitting, by the first router with local interfaces, a plurality of DVMRP probe messages on those local interfaces;

monitoring the local interfaces, by the first router, for DVMRP probe messages from neighboring multicast routers that are adjacent to the first router or are accessible via a multi-access network link;

if a DVMRP probe message is detected by the first router on an interface, marking internally, by the first router, that interface as a branch interface;

if the DVMRP probe message detected by the first router is the first branch detected, transmitting, by the first router, a route report to neighbors on the first branch;

if the DVMRP probe message detected by the first router is other than the first branch detected, transmitting, by the first router, to any previously detected neighbors, a flash router report with unreachable metric for the newly detected branch; and

transmitting, by the first router, to the newly detected branch a route report omitting reference to the previously detected branches and routes associated with those branches.